

AIRPORT SIGNS

OBJECTIVES

Using references and in accordance with AC 150/5340-18, identify

- a. The function, components and layout of a taxiway and runway signage system**
- b. For a given sign, its**
 - Color**
 - Inscription**
 - Location**

OBJECTIVES

(continued)

Using references and in accordance with AC 150/5340-18, identify

- c. Taxiway and runway sign operation and installation criteria.**

PART 139.311

Requires

- **Signs that identify taxiing routes**
- **Runway holding position markings and signs**
- **ILS critical area marking and signs**

PART 139.311

**Requires all signs
be properly maintained**

- **Clean**
- **No faded/missing/non-functional sections**
- **Unobscured and clearly visible**
- **Accurate**

FUNCTIONS OF TAXIWAY GUIDANCE SYSTEMS

- **Identify taxiway designation**
- **Identify routes to a destination**
- **Indicate hold positions**

FUNCTIONS OF TAXIWAY GUIDANCE SYSTEMS

(continued)

- **Identify boundaries for**
 - **ILS critical areas**
 - **Runway safety areas/obstacle free zones (OFZs)**
 - **Runway approach areas**

COMPONENTS OF TAXIWAY GUIDANCE SYSTEMS

- **Holding position sign and taxiway location sign**
 - Taxiway/runway intersection
 - ILS critical area
 - Runway approach area
 - Runway/runway intersection

COMPONENTS OF TAXIWAY GUIDANCE SYSTEMS

(continued)

- **Taxiway direction sign**
 - **Taxiway/taxiway intersection where aircraft would normally turn or hold short**

COMPONENTS OF TAXIWAY GUIDANCE SYSTEMS

(continued)

- **Runway exit sign at each normally used runway exit**
- **Destination sign may replace taxiway direction sign or runway exit sign at uncontrolled airport**

COMPONENTS OF TAXIWAY GUIDANCE SYSTEMS

(continued)

- **Location signs**

- Taxiway signs identify taxiways
- Runway signs identify runways
- Runway safety area/OFZ and runway approach boundary signs identify where pilot reports clear

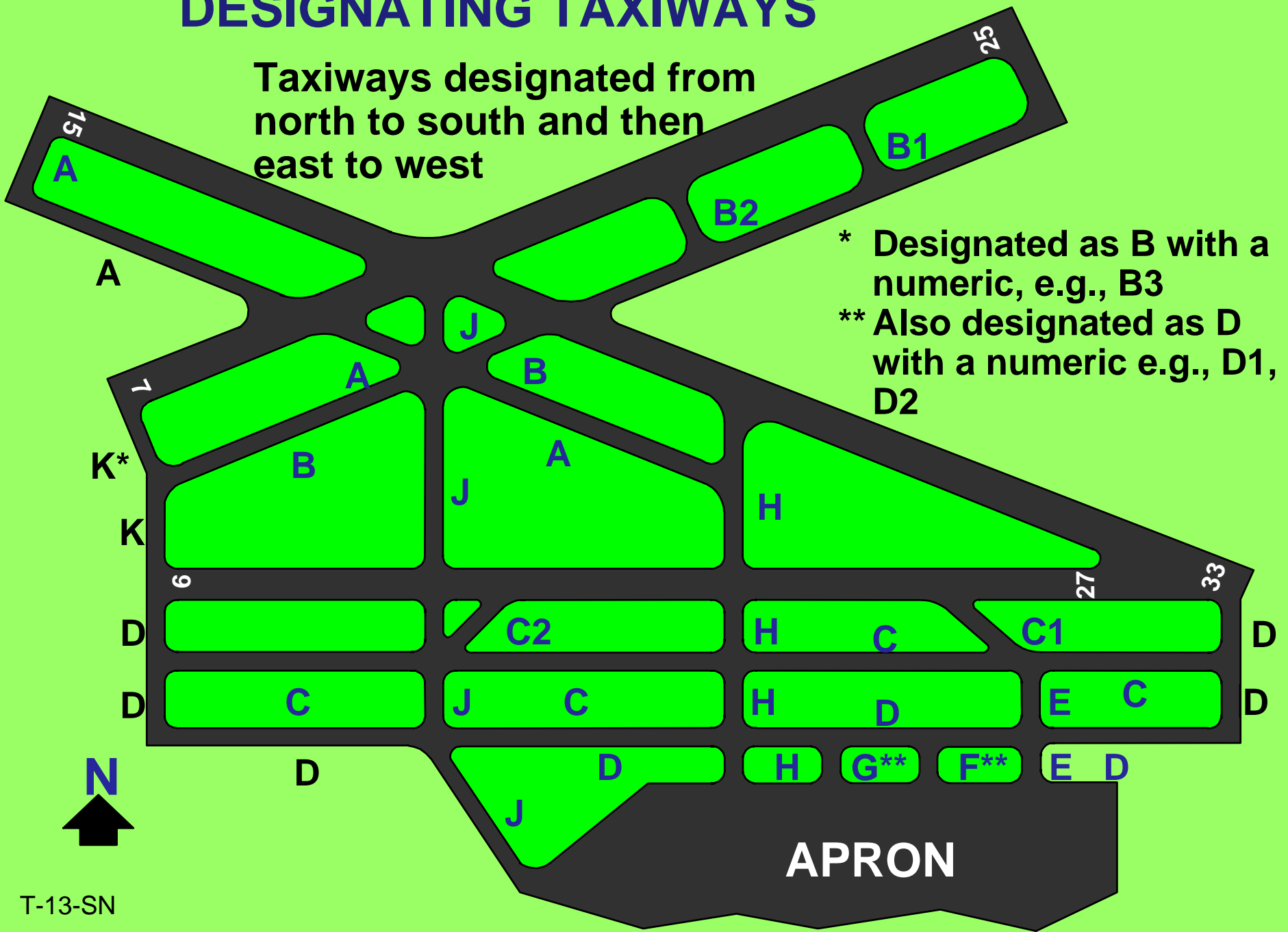
COMPONENTS OF TAXIWAY GUIDANCE SYSTEMS

(continued)

- **No entry sign for prohibited areas**
- **Taxiway ending marker for end of pavement**
- **Information signs for other information**

DESIGNATING TAXIWAYS

Taxiways designated from north to south and then east to west



15-33

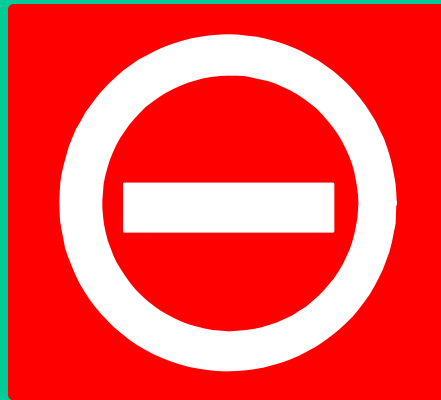
Typical holding position
sign for runways

ILS

ILS holding position
sign

15-APCH

Holding position sign for approach areas



No entry sign



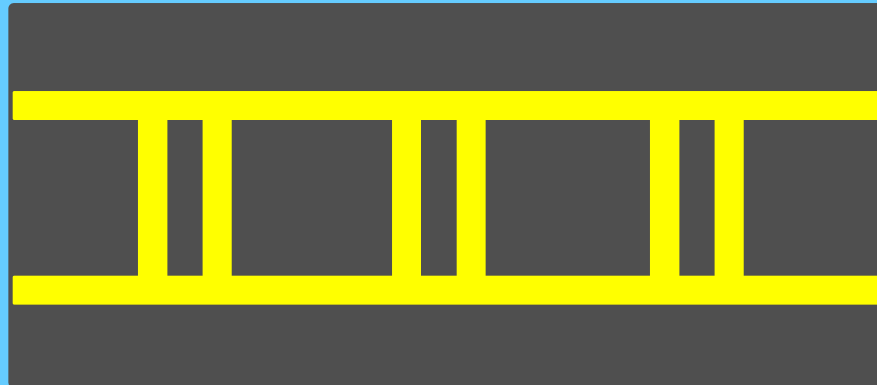
**Taxiway
location
sign**



**Runway
location
sign**



**Runway safety area/OFZ boundary sign
and runway approach area boundary sign**



ILS critical area boundary sign



Direction sign



Typical outbound destination sign

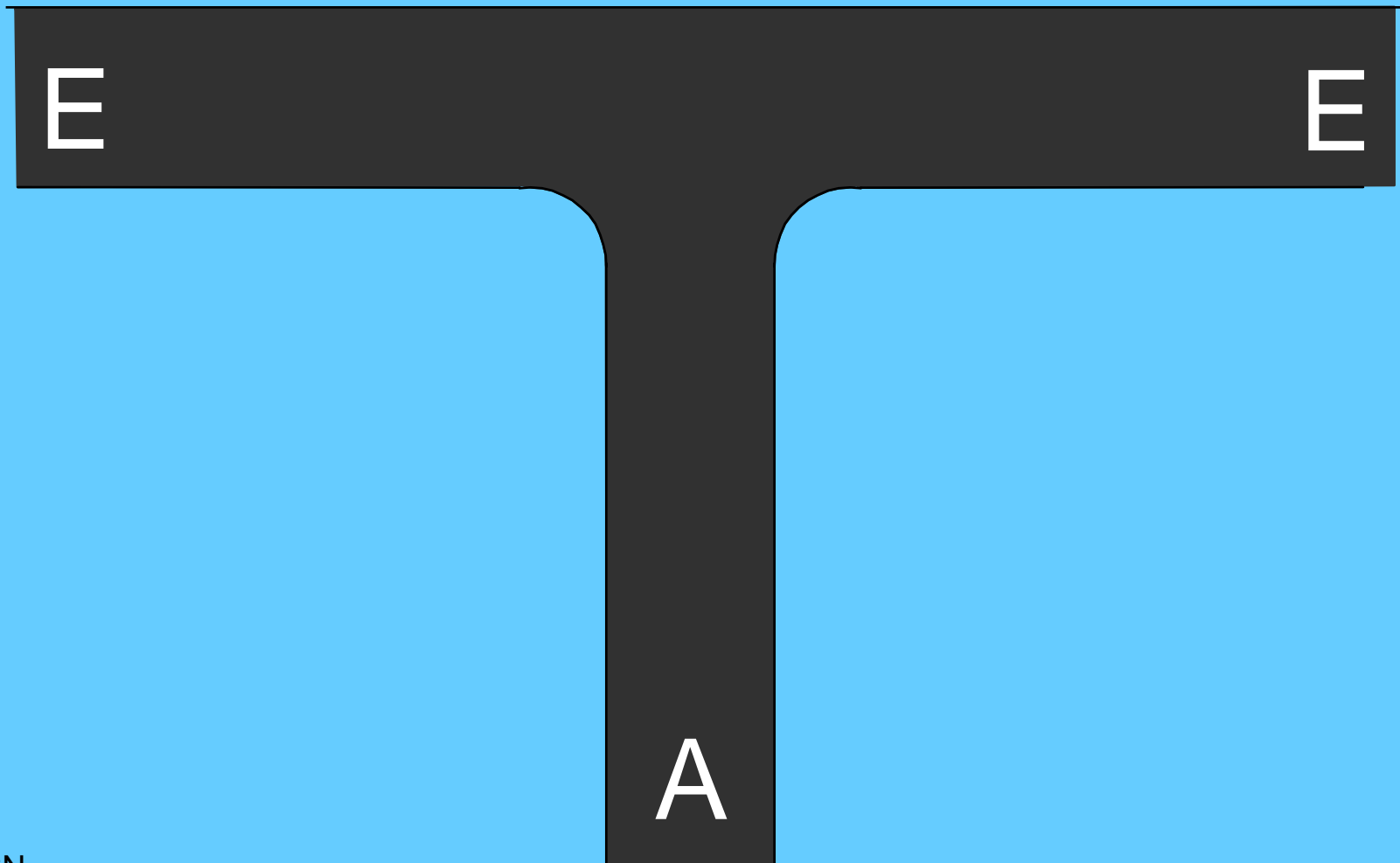


Example of an inbound destination sign



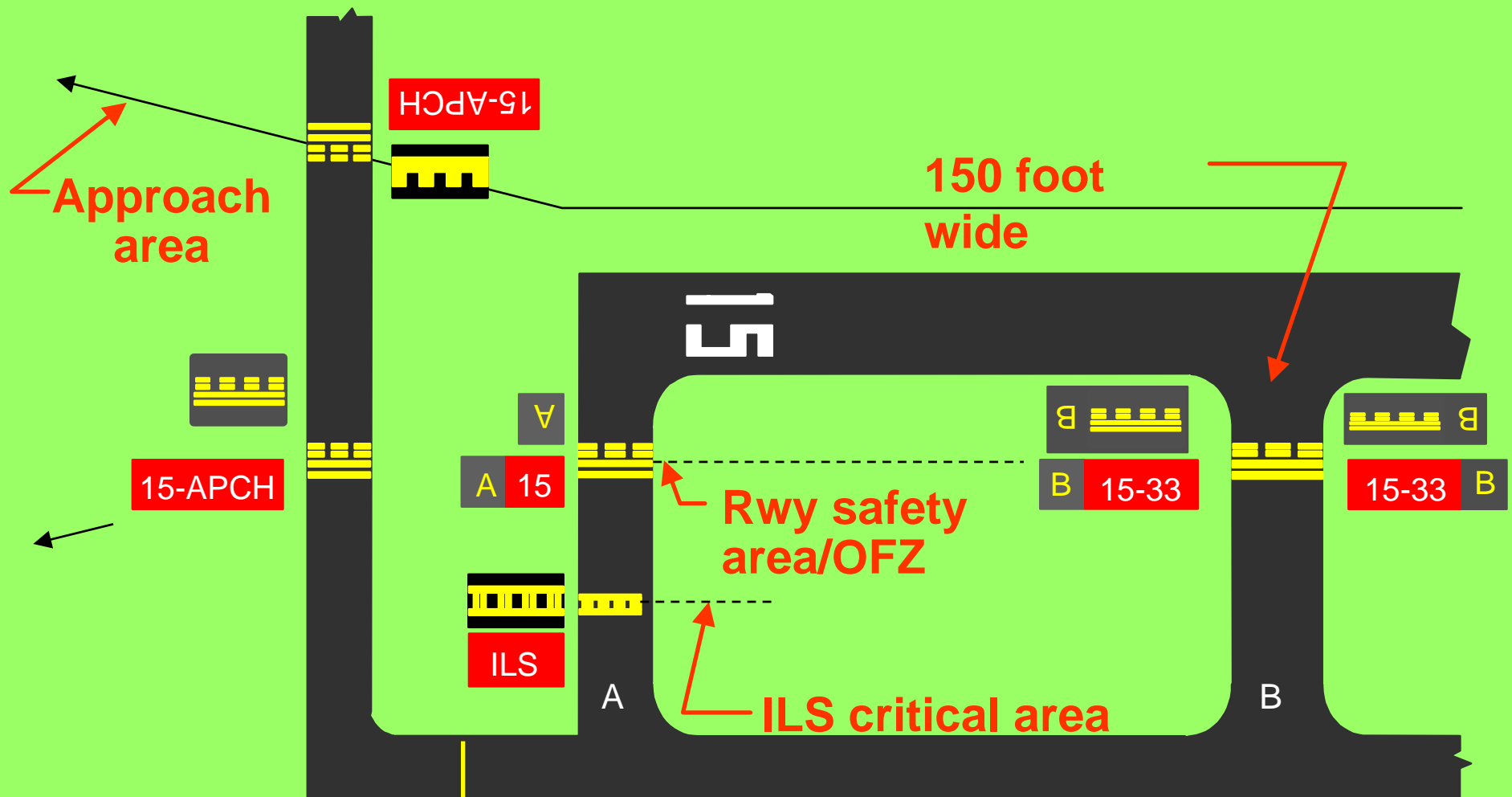
Outbound destination sign to different runways

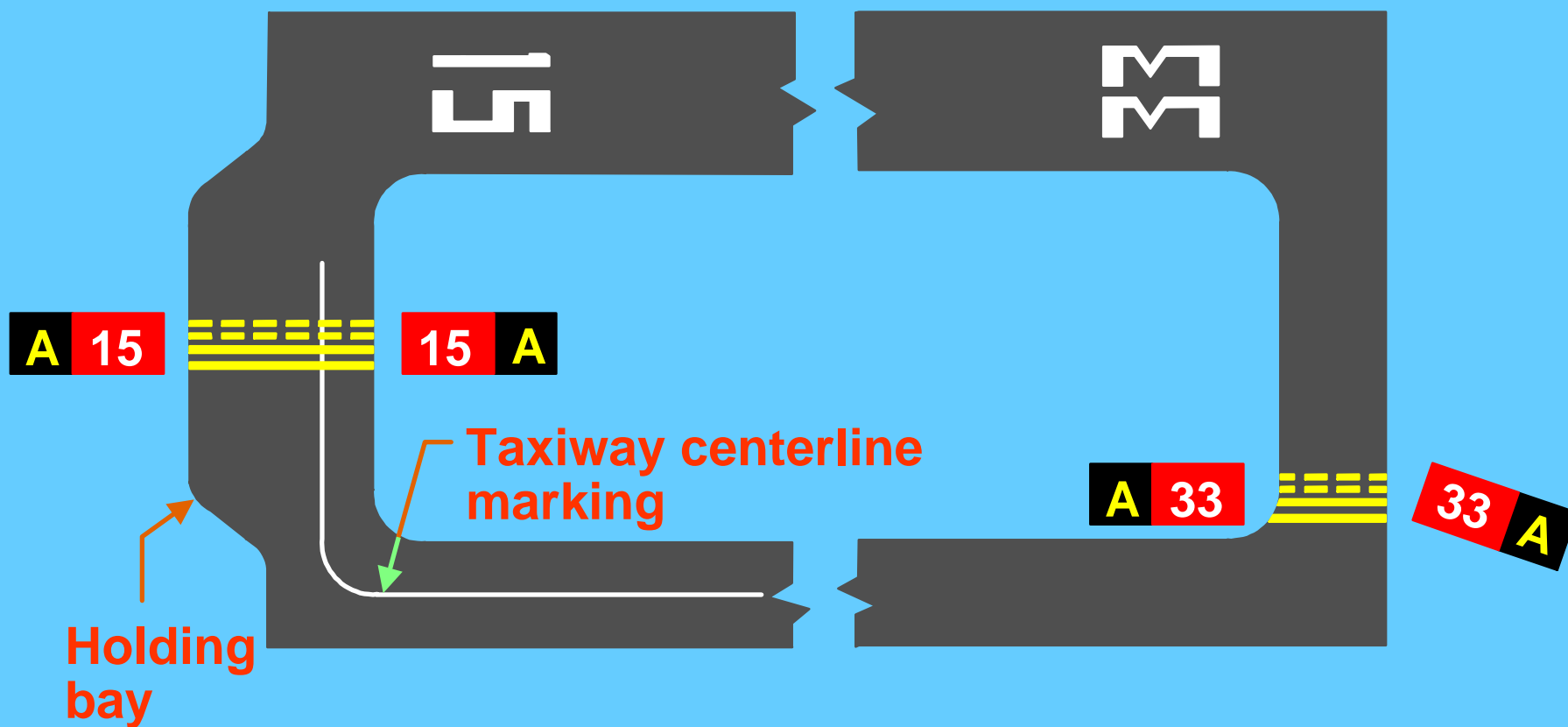
TAXIWAY ENDING MARKER



T-18-SN

APPLICATION EXAMPLES FOR HOLD POSITION SIGNS

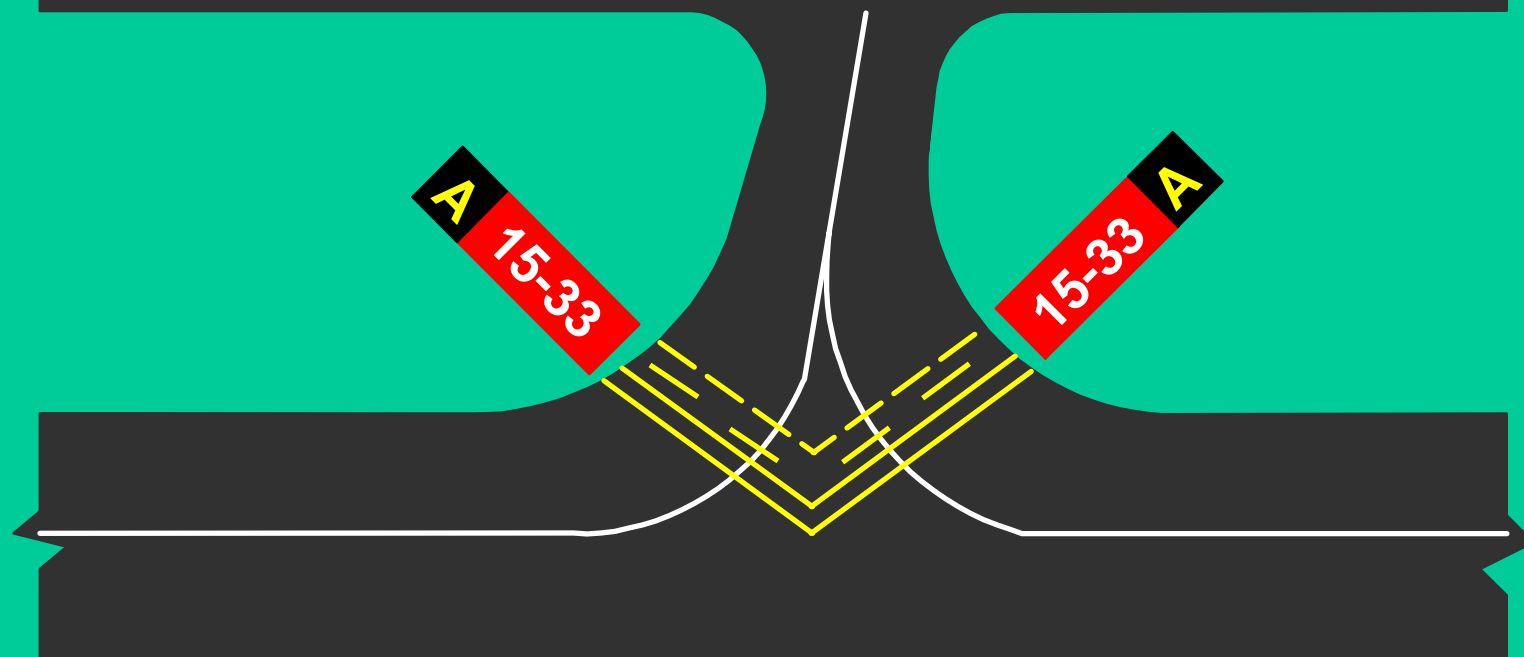




**Holding position
markings extending
across holding bay**

**Holding position
sign on left side
difficult to see**

RUNWAY 15-33

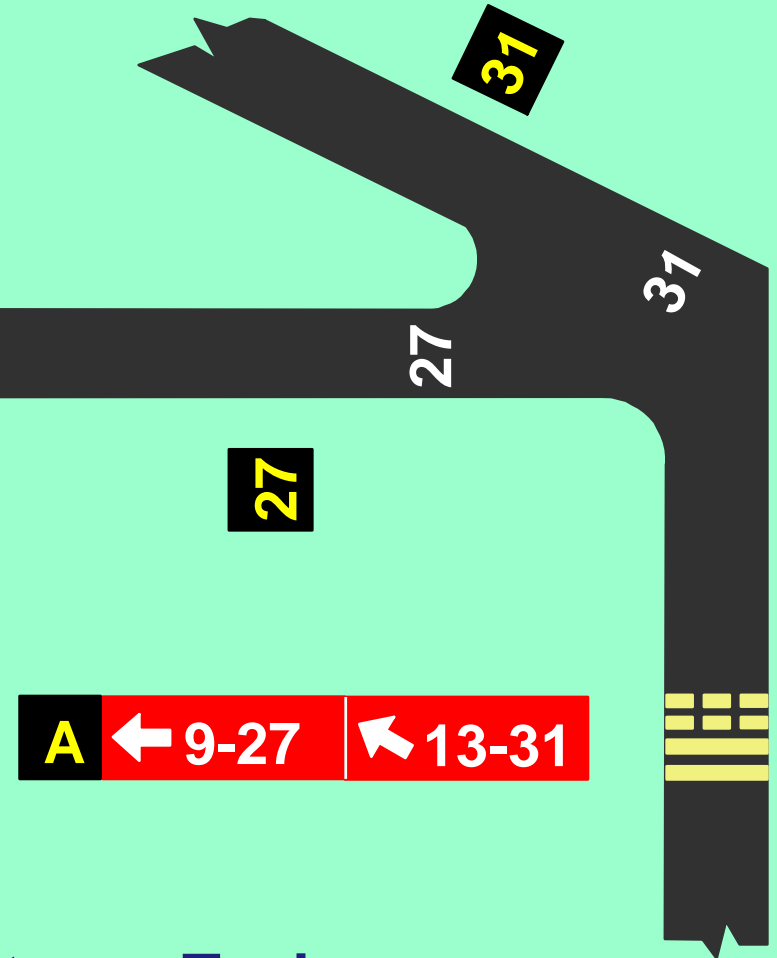


Holding position markings do not extend straight across the taxiway

RUNWAY LOCATION SIGNS AND ARROWS ON HOLDING POSITION SIGNS



Taxiway entrance at
intersection of two
runways



Taxiway
entrance at
intersection of
two runway ends

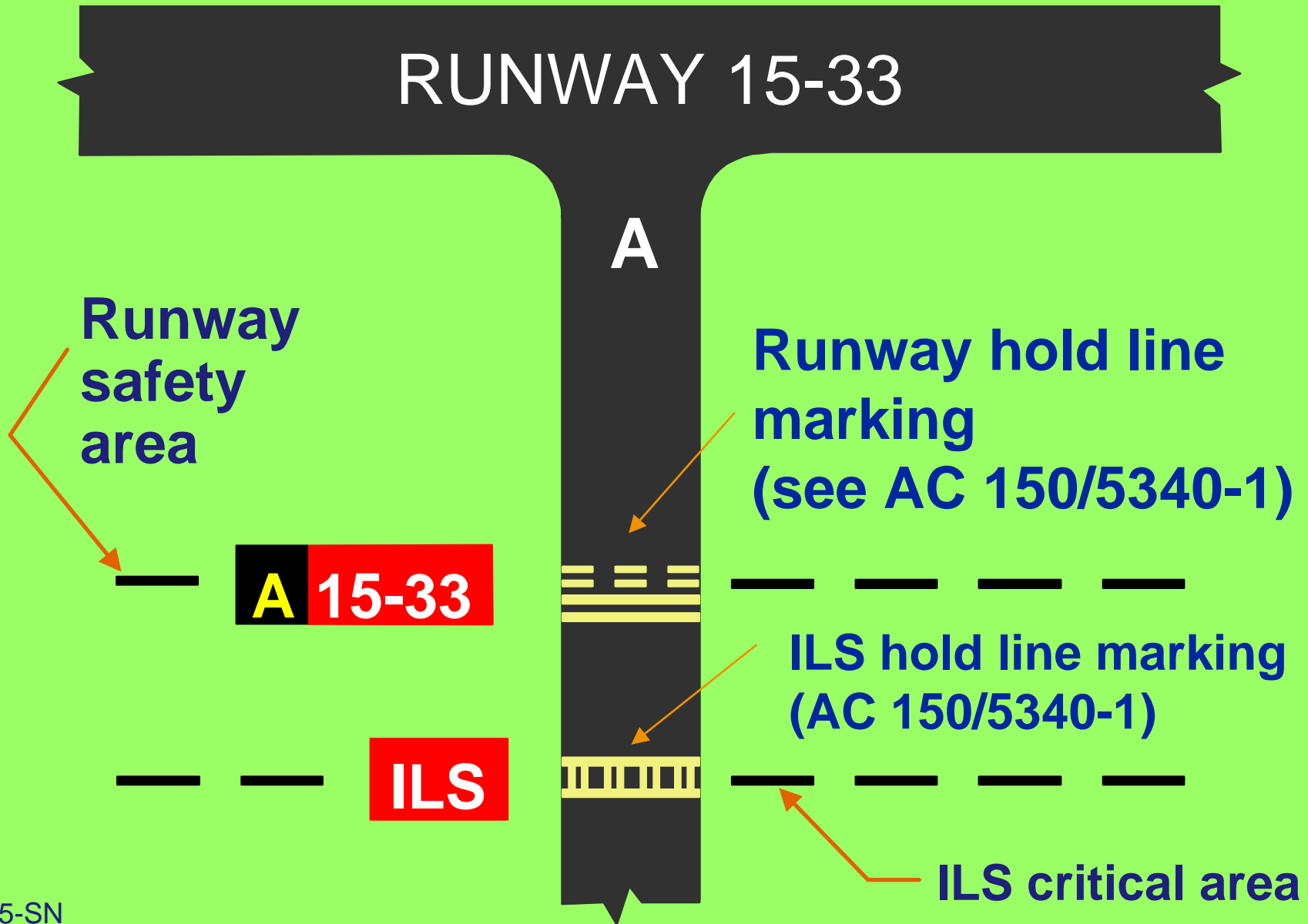
HOLDING POSITION SIGNS AT RUNWAY INTERSECTIONS



LOCATION DISTANCES FOR HOLDING POSITION MARKINGS

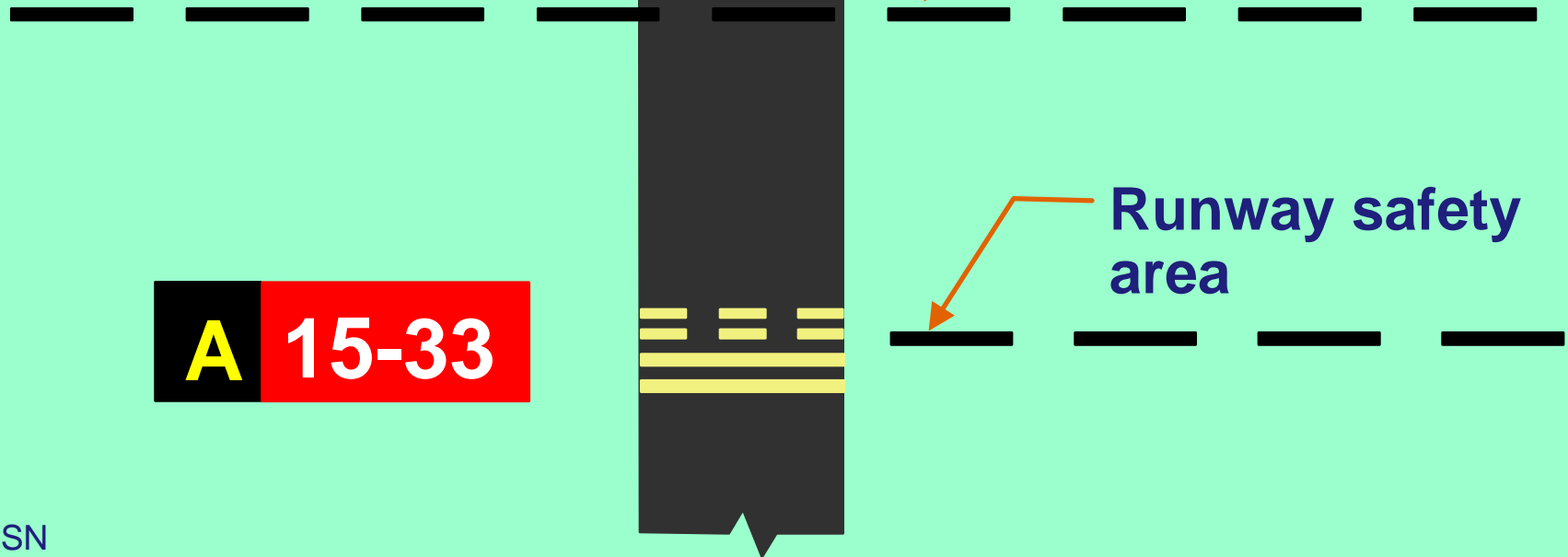
Approach category and (design group)	Perpendicular distance from runway centerline to RWY/TWY	
	Visual/Nonprecision	Precision
A & B (I & II)	125	175
A & B (I, II, & III)	200	250
A & B (IV)	250	250
C & D (I through IV)	250	250
C & D (V)	250	280

ILS HOLDING POSITION SIGN REQUIRED



ILS HOLDING POSITION SIGN NOT REQUIRED

RUNWAY 15-33



DISTANCE BETWEEN HOLDINGS 50 FEET OR LESS

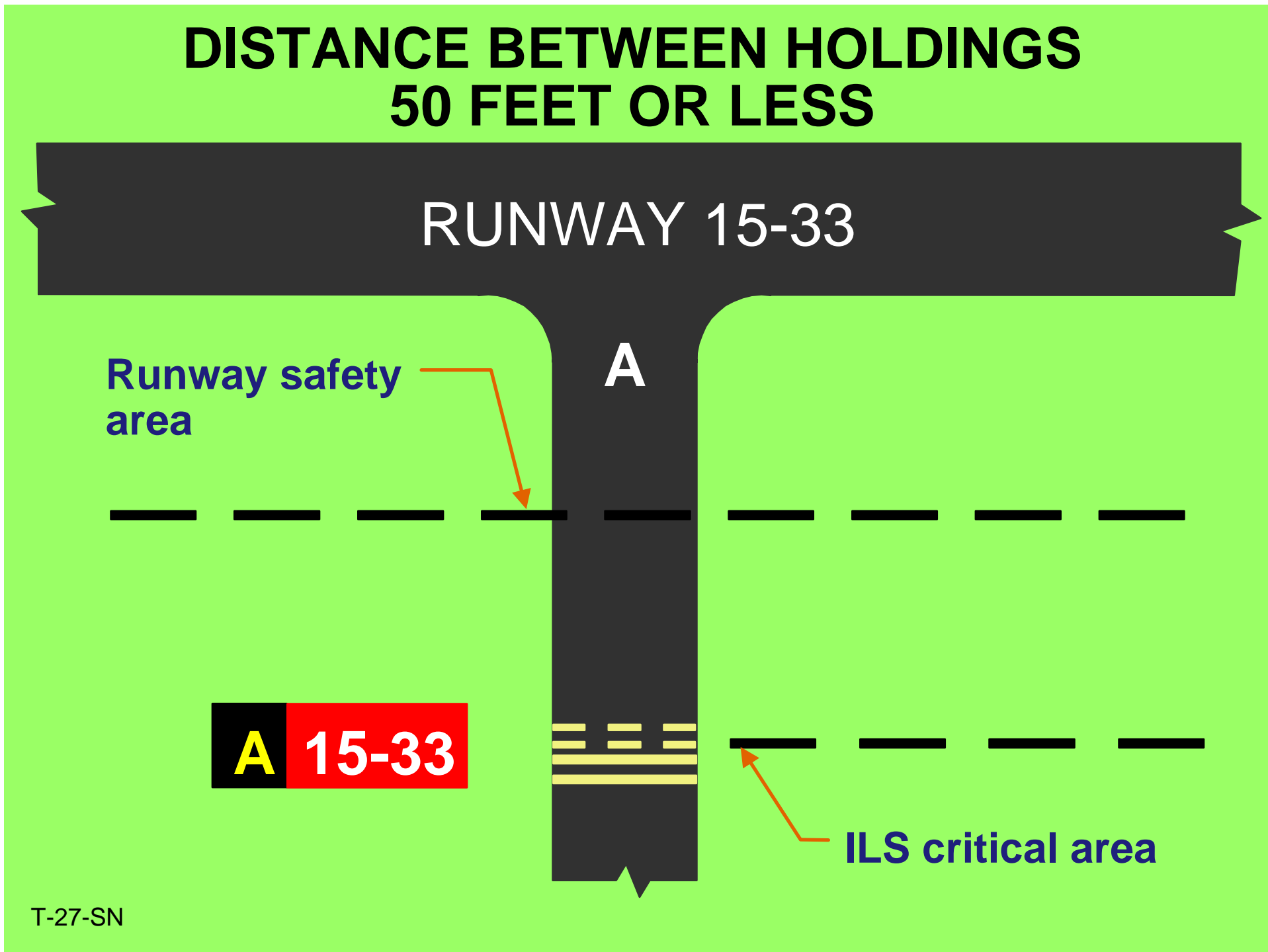
RUNWAY 15-33

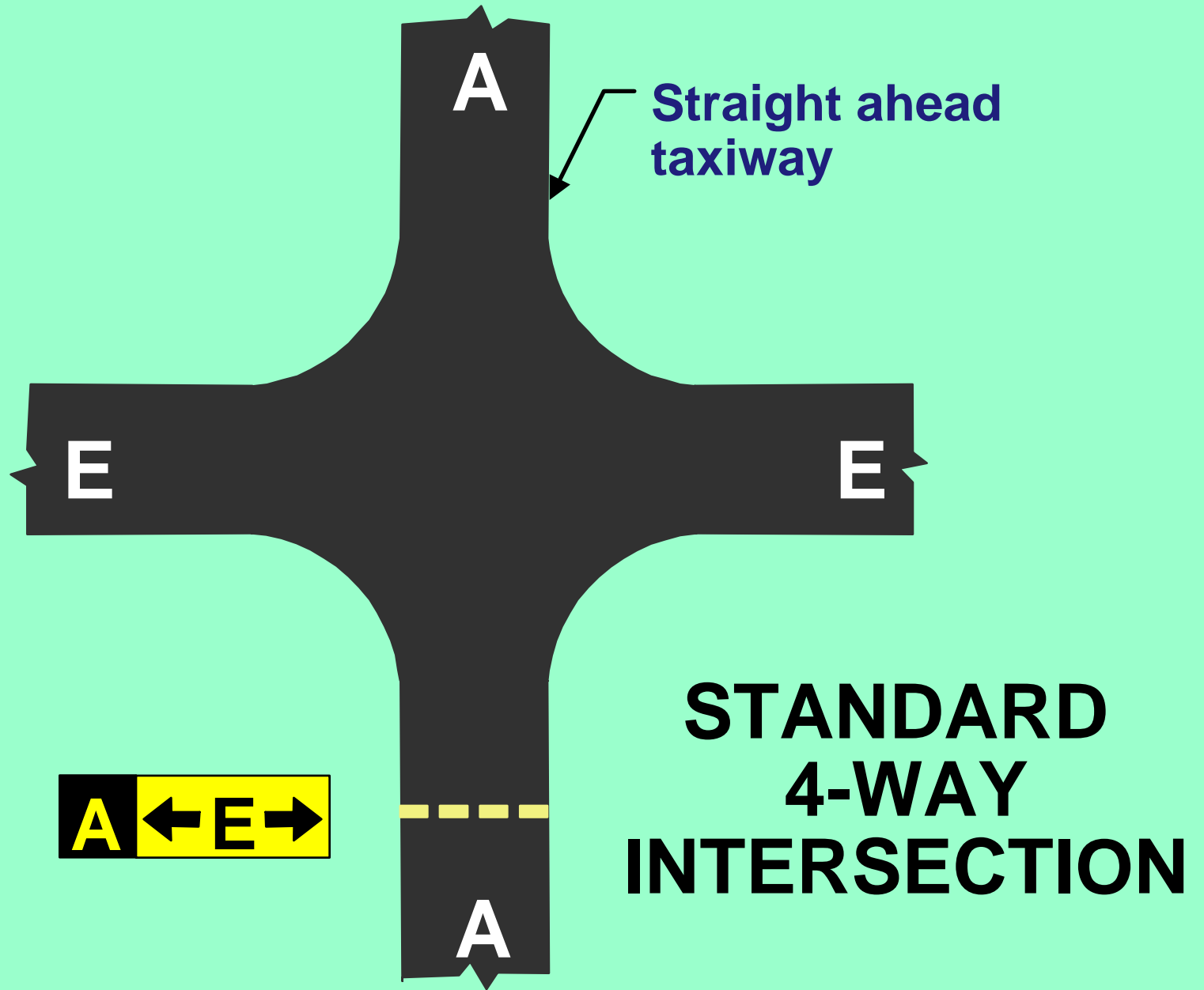
Runway safety
area

A

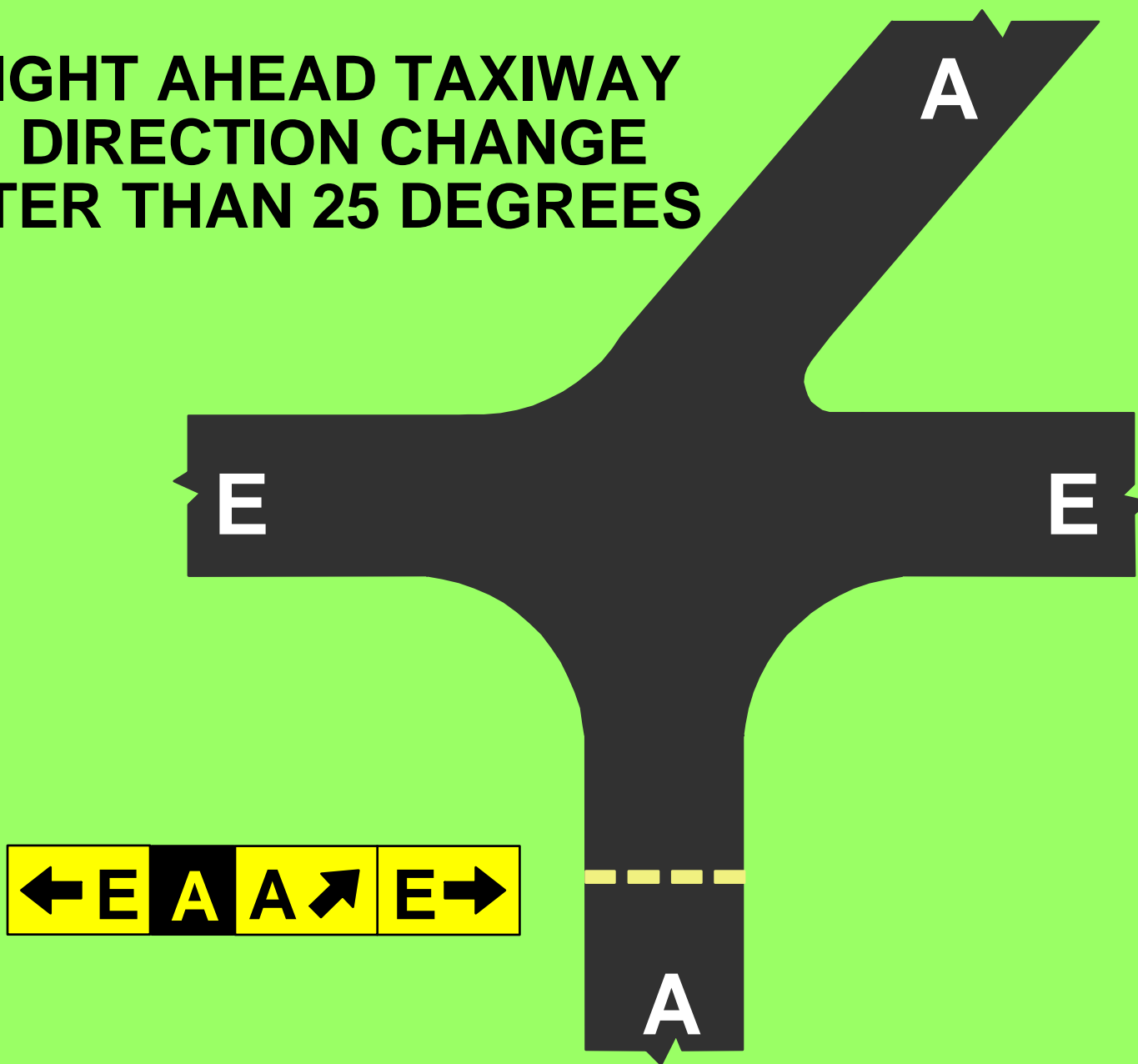
A 15-33

ILS critical area

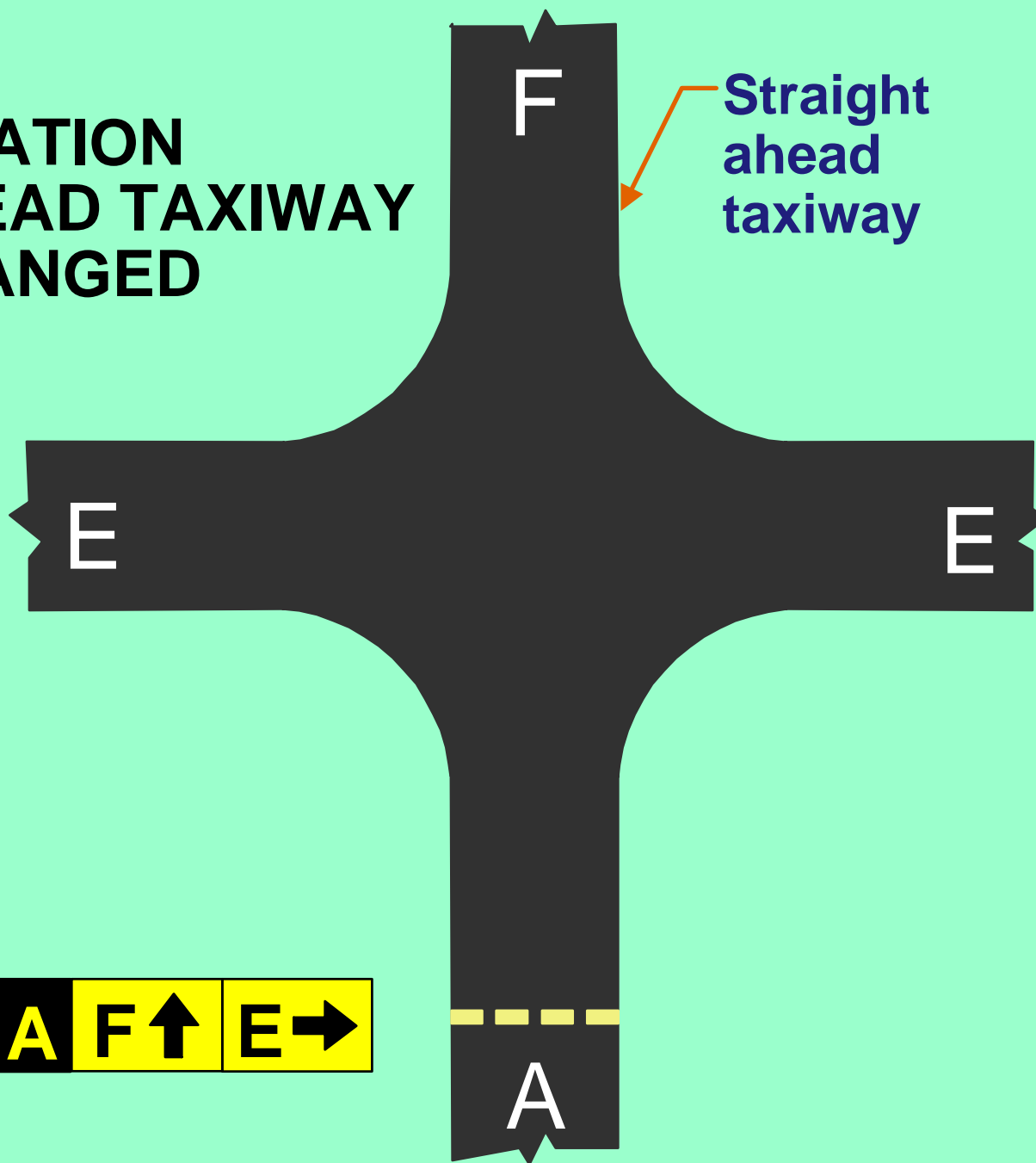




**STRAIGHT AHEAD TAXIWAY
HAS DIRECTION CHANGE
GREATER THAN 25 DEGREES**

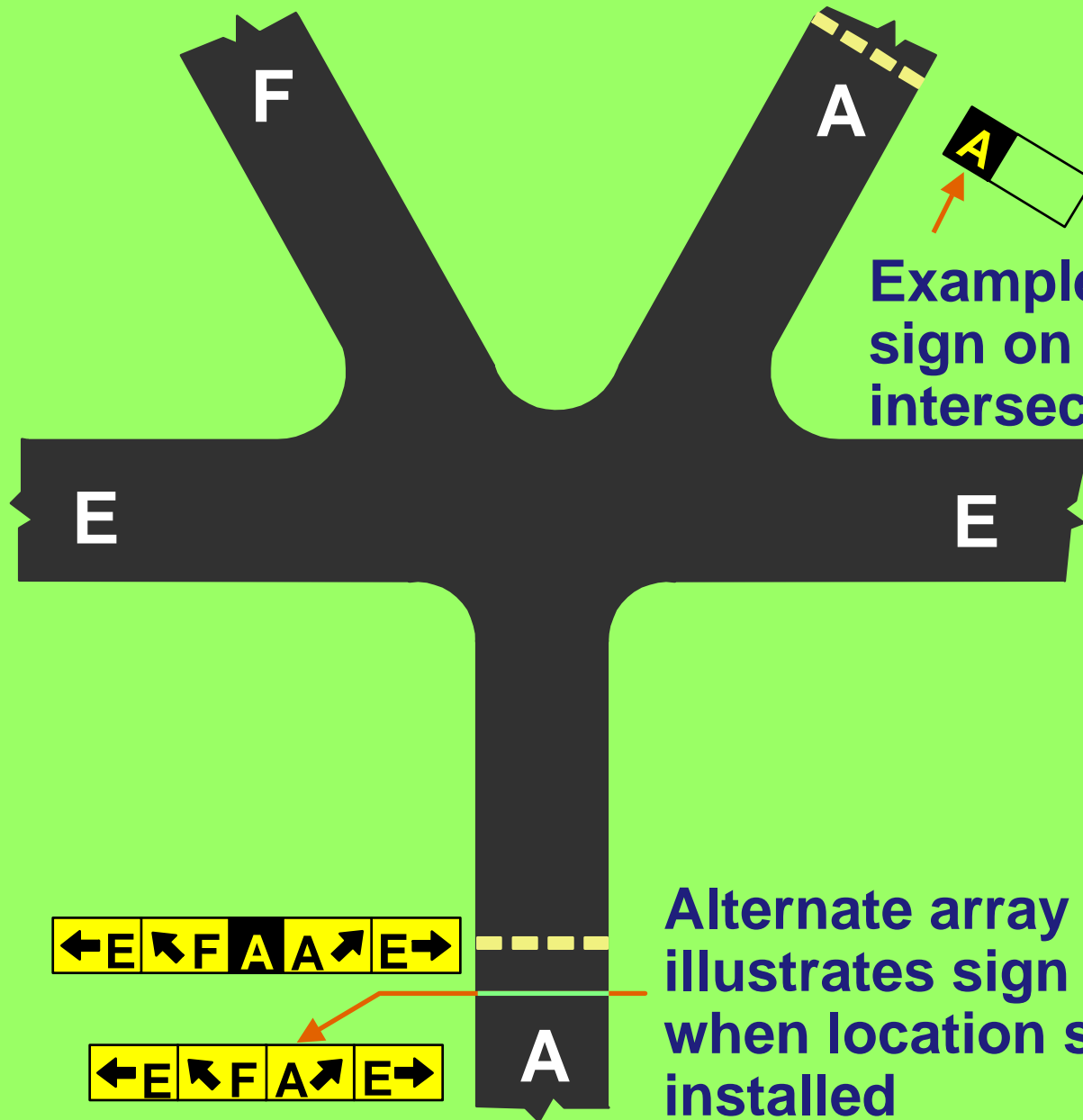


DESIGNATION STRAIGHT AHEAD TAXIWAY HAS CHANGED





**Y CONFIGURATION
WITH TAXIWAY 'A'
CHANGING
DIRECTION**



Example of location sign on far side of intersection

Alternate array of signs illustrates sign orientation when location sign not installed

PERPENDICULAR DISTANCES FOR TAXIWAY INTERSECTION MARKINGS FROM CENTERLINE OF CROSSING TAXIWAY

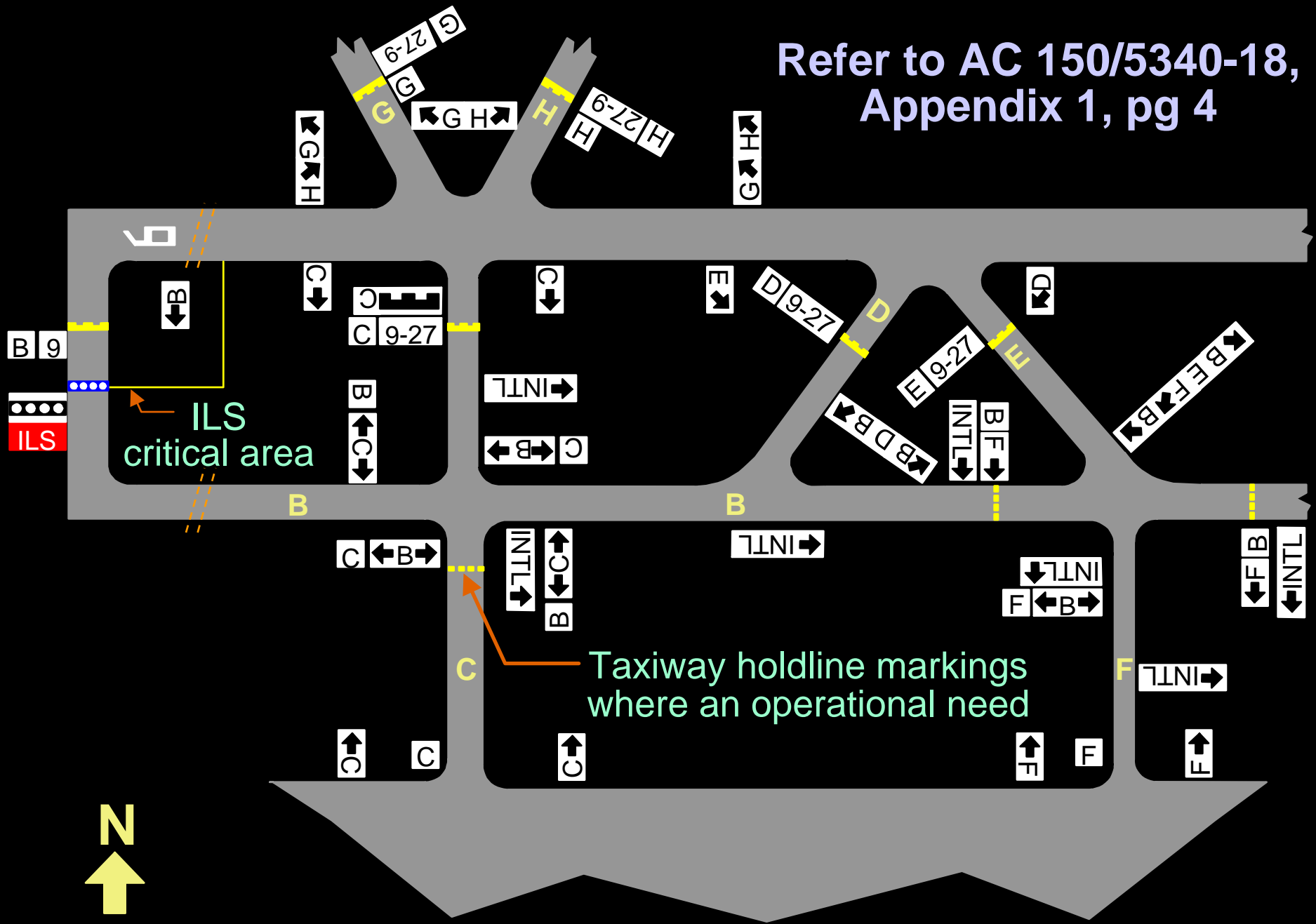
Airplane Design Group					
I	II	III	IV	V	VI
44.5'	65.5'	93'	129.5'	160'	193'

See AC 150/5300-13, Airport Design

LOCATION DISTANCES FOR TAXIWAY GUIDANCE SIGNS

Signs size	Signs height (inches)			Perpendicular distance from defined taxi/ runway edge (feet)
	Legend	Face	Installed (max.)	
1	12	18	30	10-20
2	15	24	36	20-35
3	18	30	42	35-60

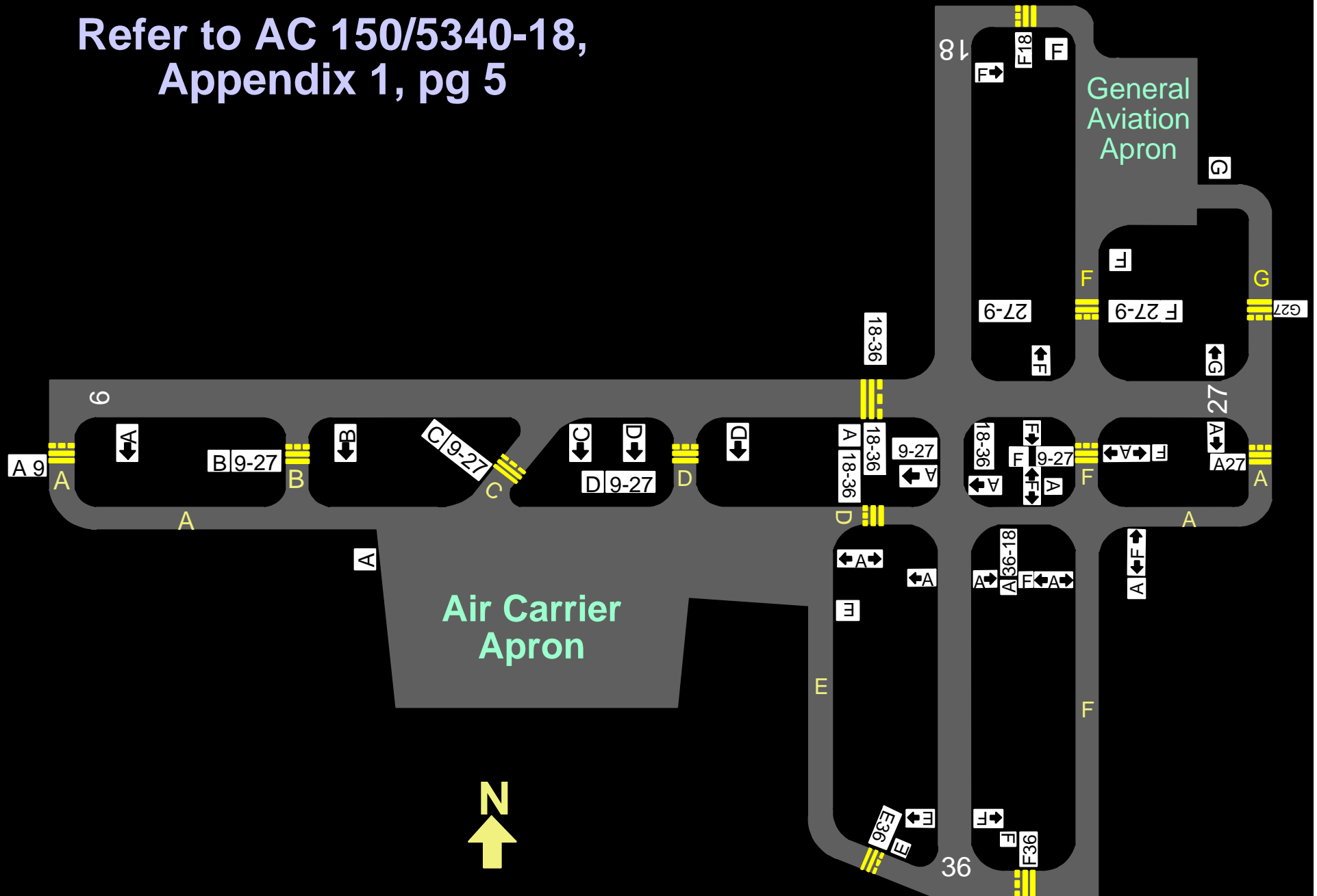
Refer to AC 150/5340-18,
Appendix 1, pg 4



T-35-SN

SIGNING EXAMPLE FOR A COMPLEX AIRPORT

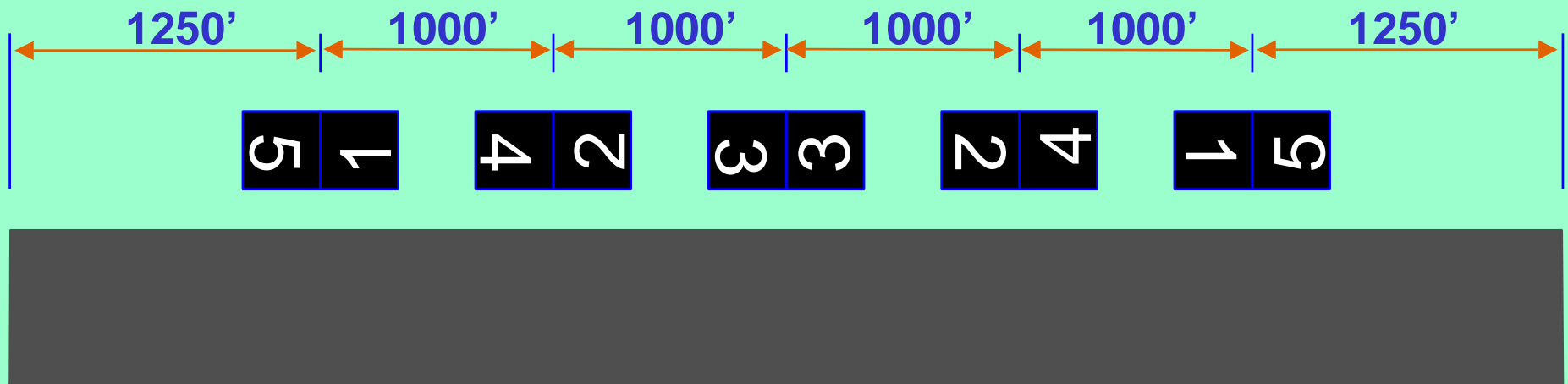
Refer to AC 150/5340-18,
Appendix 1, pg 5



T-36-SN

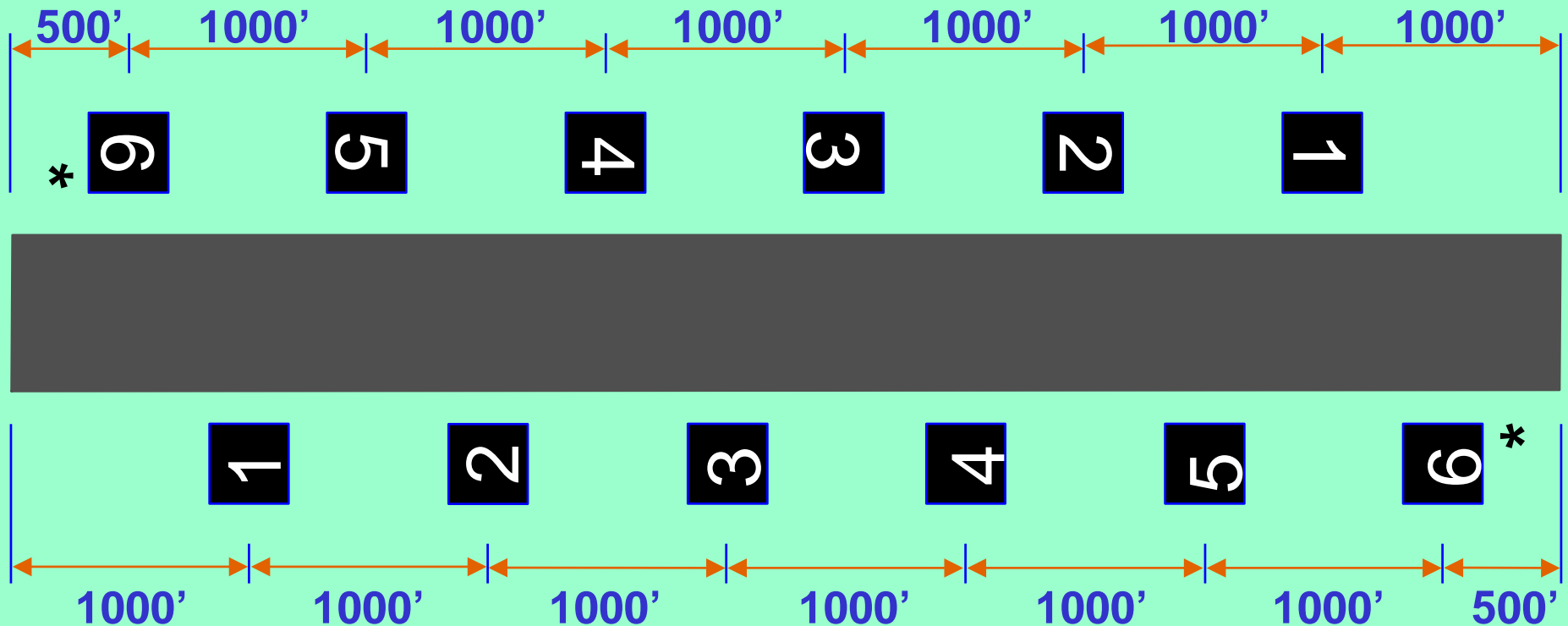
RUNWAY DISTANCE REMAINING SIGNS

Preferred Method



RUNWAY DISTANCE REMAINING SIGNS

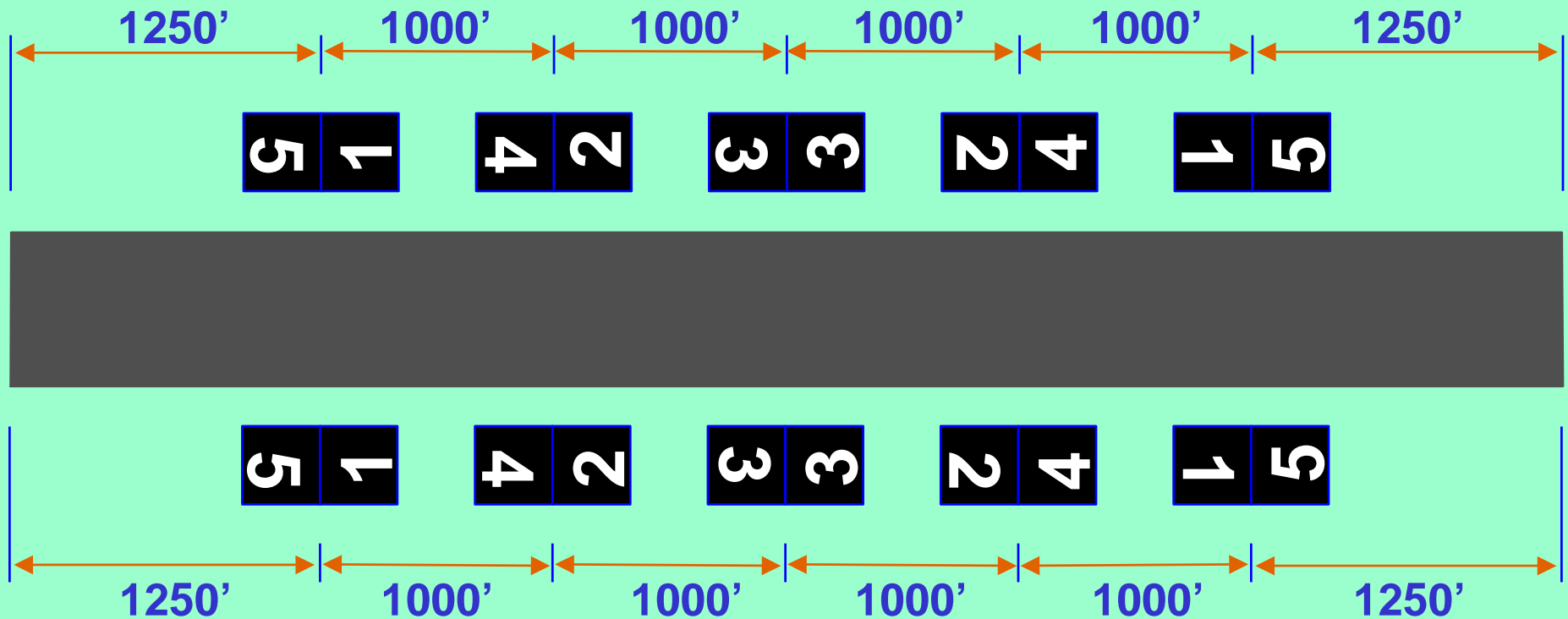
Alternate Method #1



* Less than 1000 ft. from takeoff end;
may be omitted

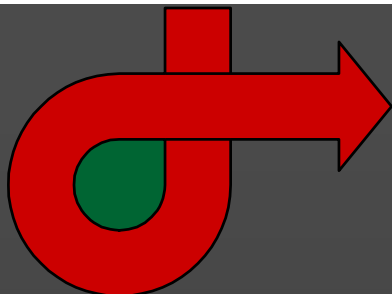
RUNWAY DISTANCE REMAINING SIGNS

Alternate Method #2



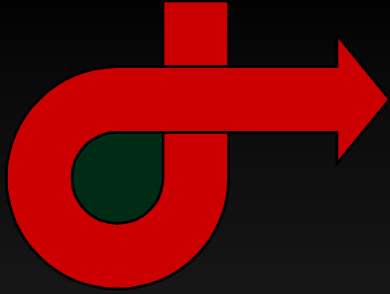
LOCATION DISTANCES FOR RUNWAY DISTANCE REMAINING SIGNS

Signs size	Signs height (inches)			Distance from defined pavement edge (feet)
	Legend	Face	Installed (max.)	
4	40	40	60	50-75
5	25	30	42	20-35



INSPECTING AIRPORT SIGNAGE

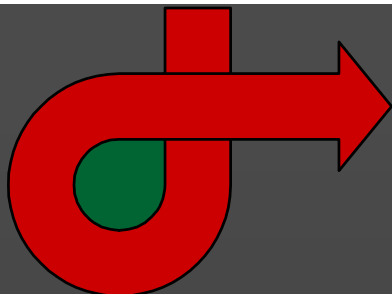
- Same size and height in one array
- Identifiable from 800 ft away
- Uniform and steady brightness



INSPECTING AIRPORT SIGNAGE

(continued)

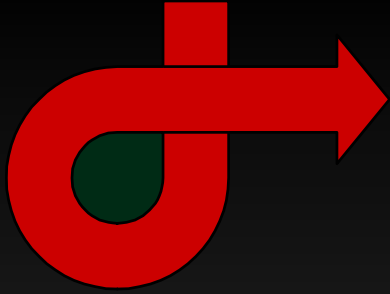
- Lighted if appropriate
- Maintained in good condition
- Not confusing or deceptive



INSPECTING AIRPORT SIGNAGE

(continued)

- Consistent with approved sign plan
- Compliant with standards
- Installed on frangible mounts with breakaway connectors



INSPECTING AIRPORT SIGNAGE

(continued)

- Mounting stakes or concrete pads flush with grade
- Level and properly oriented
- Adequate clearance
- User reports/comments